



# Oregon

Tina Kotek, Governor

## Department of Environmental Quality

Northwest Region

700 NE Multnomah Street, Suite 600

Portland, OR 97232

(503) 229-5696

FAX (503) 229-6124

TTY 711

August 2, 2023

Jim Cooper  
Alpha Environmental Services  
11080 SW Allen Blvd., Suite 100  
Beaverton, OR 97005

RE: Further Action Required  
for Hartley Motors in Warrenton  
LUST #04-04-0813

Jim Cooper:

The Department of Environmental Quality (DEQ) has completed its review of available file information for the Hartley Motors site, including the *Environmental Site Assessment Report* prepared by Alpha Environmental Services on November 18, 2021. The Hartley Motors site is located at 120 Harbor Street in Warrenton, Oregon.

DEQ understands that two gasoline underground storage tanks (USTs) were decommissioned by removal from the Hartley Motors site in April 2004. Post-removal confirmation soil sampling identified heavy oils in the west sidewall of the combined excavation pit at a concentration of 19,200 parts per million (ppm). A sample of groundwater that entered the excavation pit identified heavy oils at a concentration of 5,420,000 parts per billion (ppb). The extent of residual soil and groundwater contamination at the site was not determined, and the file remained open in DEQ's records.

Alpha Environmental conducted additional soil and groundwater sampling at the site in July 2021. Soil samples from two borings advanced adjacent to the location where 19,200 ppm heavy oils had previously been detected found only up to 320 ppm heavy oils, and no petroleum products were detected in the groundwater. However, a soil sample from a separate boring on the east edge of the property encountered heavy oils at a concentration of 22,800 ppm.

The heavy oil contamination does not appear to present an unacceptable risk to occupants of the site, as the heavy oil is nonvolatile and at least five feet below ground surface (bgs). However, the contamination exceeds the risk-based screening level of 2,200 ppm for direct contact by construction workers calculated by DEQ in a January 2016 memo (attached). Construction workers may come into direct contact with soils up to 15 feet bgs while constructing basements, underground parking garages, etc.

At a minimum, the extent of heavy oil contamination in soils at the site exceeding a concentration of 2,200 ppm needs to be determined. If the contaminated soils are left in place, DEQ may require that an Easement & Equitable Servitudes (deed restriction) be recorded with the property deed alerting future owners of the property to the presence of the residual

contamination. The owner/operator of the Hartley Motors property may also elect to remove or otherwise remediate the heavy oil contamination to concentrations below 2,200 ppm.

If you have any questions about this letter, please contact me by phone at (503) 229-5369 or by e-mail at [kevin.dana@deq.oregon.gov](mailto:kevin.dana@deq.oregon.gov). DEQ appreciates your work on this project.

Sincerely,

A handwritten signature in blue ink that reads "Kevin Dana". The signature is written in a cursive, flowing style.

Kevin Dana, Cleanup Project Manager  
Northwest Region Cleanup Program

Attachment: January 2016 Heavy Oil Memo

cc: William Hartley, Hartley Motors  
LUST #04-04-0813 File

To: ECSI Cleanup File 3390, Central Machine Works  
 Voluntary Cleanup

Date: January 27, 2016

From: Rob Hood  
 Cleanup Project Manager

*RAH*

Subject: Conservative Site-Specific Calculation for Heavy Oil

Due to the variable character of heavy and waste oils, DEQ does not provide generic risk-based concentrations for this kind of hydrocarbon. As a result, a responsible party typically needs to complete additional analyses for extractable petroleum and/or volatile petroleum hydrocarbons (EPH and VPH) fractions before site-specific risk-based concentrations can be calculated from the results. Rather than requesting additional investigation, due to the limited nature of this release, DEQ inputted conservative assumptions into the total petroleum hydrocarbons (TPH) site-specific spreadsheet (which provides a worst-case composition of non-gasoline range petroleum hydrocarbons). Adjustments were then made to the last three of each of the aliphatic and aromatic chains in the spreadsheet by adding a concentration of "1,000" into the input values and then recalculating for each input (a total of six inputs and recalculations). The adjusted spreadsheet that contained the most conservative risk-based concentrations was used for risk comparison to remaining concentrations (aliphatic C12-C16). The attached TPH spreadsheet shows the inputted value and the site-specific risk-based concentrations that were developed. The screening levels for heavy oil in soil and groundwater are presented in the tables below.

**Site-Specific RBCs Calculated for Soil**

<b>Soil Ingestion, Dermal Contact &amp; Inhalation (mg/kg)</b>	<b>TPH Oil RBC (mg/kg)</b>
Residential	570
Urban Residential	1,100
Occupational	7,200
Construction Worker	2,200
Excavation Worker	62,000
<b>Vapor Intrusion into Buildings (mg/kg)</b>	
Residential	>Max
Urban Residential	>Max
Occupational	>Max
<b>Volatilization to Outdoor Air (mg/kg)</b>	
Residential	>Max
Urban Residential	>Max
Occupational	>Max
<b>Soil Leaching to Groundwater (mg/kg)</b>	
Residential	>Max



Urban Residential	>Max
Occupational	>Max

**Site-Specific RBCs Calculated for Groundwater**

<b>Ingestion &amp; Inhalation from Tap Water (ug/L)</b>	<b>TPH Oil RBC (Ug/L)</b>
Residential	370
Urban Residential	370
Occupational	1,500
<b>Vapor Intrusion into Buildings (ug/L)</b>	
Residential	>S
Urban Residential	>S
Occupational	>S
<b>Volatilization to Outdoor Air (ug/L)</b>	
Residential	>S
Urban Residential	>S
Occupational	>S
<b>Groundwater in Excavation (ug/L)</b>	
Construction and Excavation workers	>S

>Max: The constituent RBC for this pathway is greater than 1,000,000 mg/kg. Therefore, these substances are not expected to pose risks in this scenario.

>S: This groundwater RBC exceeds the solubility limit. Groundwater concentrations in excess of "S" indicate that free product may be present.

Based on review of the data to the developed screening levels, there are no unacceptable risks to any of the applicable direct or indirect exposure pathways.

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